UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,492	12/26/2000	Christoph Stiller	10191/1620	2842

26646 7590 12/20/2002

KENYON & KENYON
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER
SUN, XIUQUIN

ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 12/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/748,492	STILLER, CHRISTOPH	
	Examiner	Art Unit	
	Xiuqin Sun	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 September 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 5-8* is/are rejected.

7)☒ Claim(s) *3-4* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Franke et al. (U.S. Pat. No. 6292752 B1).

Franke et al. teach a method for calibrating a sensor system for detecting and analyzing an object in a path of a vehicle (see abstract and col. 2, lines 39-51), including the steps of: detecting characteristic data of the object by operating the sensor system (col. 2, lines 20-29, col. 3, lines 35-42, lines 51-57 and col. 5, lines 1-12); sending to a calibration unit data that is interpreted as representing the object as one of stationary and quasi-stationary, taking into account a motion of the vehicle (see Fig. 2; col. 2, lines 29-44; col. 5, lines 13-33); determining a deviation in instantaneously measured data from data of a model of the object as an error vector (see Fig. 2 and col. 5, lines 13-29); and correcting, in accordance with the deviation, the data of the model in order to

minimize the deviation (col. 5, lines 29-33; col. 7, lines 31-67 and col. 8, lines 1-13). Franke et al. further teach or suggest the elements: after an initialization phase occurring in accordance with preselectable parameters, performing a first determination of object data stored as model data, and in all subsequent measurements performed cyclically, processing instantaneous data of the object data in the calibration unit with the previously determined and stored model data in order to obtain the respective error vector (col. 6, lines 5-60); a rotational motion of the vehicle due to at least one of a pitching motion and a turning a corner corresponds to the motion of the vehicle (col. 3, lines 51-57); and transferring a result of a calibration of a sensor of the sensor system to at least one other sensor in the vehicle in order to calibrate the at least one other sensor (col. 2, lines 39-51 and col. 5, lines 34-39).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franke et al. (U.S. Pat. No. 6292752 B1) in view of Lemelson et al. (U.S. Pat. No. 6275773 B1).

Franke et al. teach a method that includes the subject matter discussed above except: causing a sensor arranged in an image recording system of the sensor system

to serially determine and analyze pixels in accordance with an electronic camera having a nonlinear transformer characteristic in a recording interval; sending a signal to one of an analyzer unit and a driver of the vehicle when at least one sensor of the sensor system yields contradictory measurement data.

Lemelson et al. disclose a system and method for vehicle collision avoidance warning and control which teaches the step of: causing a sensor arranged in an image recording system of the sensor system to serially determine and analyze pixels in accordance with an electronic camera having a nonlinear transformer characteristic in a recording interval (col. 22, lines 13-33 and col. 23, lines 39-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teachings of Lemelson electronic camera and image analysis technique in the Franke method and system in order to accurately locate the coordinates of vehicles on a roadway and to derive vehicle velocity and acceleration vectors to determine possible hazardous situations.

Lemelson et al. further teach the step of sending a signal to one of an analyzer unit and a driver of the vehicle when at least one sensor of the sensor system yields contradictory measurement data (col. 14, lines 34-47; col. 19, lines 66-67 and col. 20, lines 1-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Franke method and system to have the step and means for generating warning signals as taught by Lemelson et al. in order to derive

control and warning signals to attempt to avoid and minimize the effects of imminent collisions.

Allowable Subject Matter

5. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-2, 5-6 and 8 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-2, 5-8 are rejected as new art (U.S. Pat. No. 6292752 B1) has been found to teach the steps of: sending to a calibration unit data that is interpreted as representing the object as one of stationary and quasi-stationary, taking into account a motion of the vehicle; determining a deviation in instantaneously measured data from data of a model of the object as an error vector; and correcting, in accordance with the deviation, the data of the model in order to minimize the deviation. For detailed response, please refer to paragraphs 2-8 set forth above in this Office Action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (703)305-3467. The examiner can normally be reached on 7:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703)308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

XS

X.S
December 13, 2002

John Barlow
Supervisory Patent Examiner
Technology Center 2800